

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (currently amended): A method for measuring quality of service at an application level in a telecommunication network, the method comprising:

monitoring operation of an application by a monitoring apparatus through a network interface including:

monitoring the network interface for data packets;

receiving, at the monitoring apparatus, a data packet as the data packet is being transmitted between two network nodes, other than the monitoring apparatus, through the network interface; and

filtering the received data packet; and

storing network data associated with the data packet received through the network interface in a buffer of the monitoring apparatus, the network data indicative of a behavior of the network;

receiving a trigger signal at the monitoring apparatus from a remote network entity in response to a critical situation corresponding to the quality of service of the application; and

in response to receiving the trigger signal, transmitting, from the monitoring apparatus, the stored network data to a remote network archive.

2 (previously presented): The method of claim 1, wherein the critical situation is detected based on data from a plurality of monitoring apparatuses.

3 (previously presented): The method of claim 1, further comprising measuring the data indicative of the behavior of said network in synchronized fashion with at least one other monitoring apparatus.

4 (previously presented): The method of claim 1, wherein the archive is configured to store data from a plurality of monitoring apparatuses.

5 (previously presented): The method of claim 1, wherein the network entity from which the trigger signal is received includes a centralized coordination apparatus configured to transmit trigger signals to a plurality of monitoring apparatuses.

6 (previously presented): The method of claim 1, further comprising:

associating an activation function configured to test the operation of the application to a control function configured to detect the critical situation relating to the quality of service.

7 (previously presented): The method of claim 6, wherein the activation function and said control function co-operate with each other according to an agent/server configuration, in which said activation function acts as an agent and said control function acts as a server.

8 (cancelled).

9 (previously presented): The method of claim 1, wherein storing data indicative of the behavior of said network includes storing data relating to a given time window.

10 (previously presented): The method of claim 1, wherein at least one of the trigger signal and the data indicative of the behavior of the network is transmitted through a direct transmission channel.

11 (cancelled).

12 (currently amended): The method of claim 1, wherein the monitoring apparatus ~~includes a filtering function is further~~ configured to intercept said trigger signal transmitted on said network.

13 (currently amended): A system for measuring the quality of service at an application level in a telecommunication network, the system comprising:

at least one activating apparatus configured to carry out sessions at the application level on said network (N),

at least one monitoring apparatus configured to:

monitor a network interface for data packets;
receive a data packet as the data packet is being transmitted between two network
nodes other than the monitoring apparatus through the network interface, and
filter the received data packet; and
~~measure and store data indicative of the behavior of said network;~~
at least one testing apparatus, separate from the at least one monitoring apparatus, configured to:
detect a critical situation related to said quality of service, and
to generate, in response to said critical situation, a trigger signal; and
a collecting apparatus configured to collect, in response to the generation of said trigger signal, said data indicative of the behavior of the network measured and stored in said at least one monitoring apparatus.

14 (previously presented): The system of claim 13, further comprising a plurality of monitoring apparatuses configured to measure and store said data indicative of the behavior of the network.

15 (previously presented): The system of claim 14, further comprising a plurality of synchronization modules associated with said plurality of monitoring apparatuses to measure said data indicative of the behavior of said network (N) in synchronized fashion.

16 (previously presented): The system of claim 13, wherein the at least one monitoring apparatus further comprises:

a memory configured to store said data indicative of the behavior of said network, and
a transmission module configured to transmit said data indicative of the behavior of said network to said collecting apparatus in response to said trigger signal.

17 (previously presented): The system of claim 13, further comprising a central management apparatus separate from the at least one monitoring apparatus, wherein the central management apparatus is configured to receive said trigger signal from said at least one testing apparatus and to broadcast said trigger signal to said at least one monitoring apparatus.

18 (previously presented): The system of claim 13, wherein the at least one activating apparatus and said at least one testing apparatus mutually co-operate according to a general agent/server configuration, in which said activating apparatus acts as agent and said verification apparatus acts as server.

19 (previously presented): The system of claim 13, wherein the at least one monitoring apparatus is configured to monitor for the data through at least one interface used by an application in the network.

20 (previously presented): The system of claim 13, wherein the at least one monitoring apparatus comprises a memory dimensioned to store at least a portion of the data indicative of the behavior of said network relating to a given time window.

21 (previously presented): The system of claim 13, further comprising at least one transmission channel to forward:

 said trigger signal to said at least one monitoring apparatus, and

 said data indicative of the behavior of the network from said at least one monitoring apparatus.

22 (cancelled).

23 (previously presented): The system of claim 13, wherein the at least one monitoring apparatus comprises a filtering module configured to intercept said trigger signal transmitted.

24-31 (cancelled).

32 (currently amended): One or more computer readable media storing computer readable instructions that, when executed, cause an apparatus to:

 monitor operation of an application through a network interface including:
 monitoring the network interface for data packets;

receiving, at the monitoring apparatus, a data packet as the data packet is being transmitted between two network nodes other than the monitoring apparatus through the network interface, and

filtering the received data packet; and;

store network data associated with the data packet received through the network interface in a buffer of the apparatus, the network data indicative of a behavior of the network;

receive a trigger signal from a remote network entity in response to a critical situation corresponding to quality of service of the application; and

in response to receiving the trigger signal, transmit the stored network data to a remote network archive.

33 (previously presented): The one or more computer readable media of claim 32, wherein the apparatus is a monitoring apparatus and wherein the critical situation is detected based on data from a plurality of monitoring apparatuses.

34 (previously presented): The one or more computer readable media of claim 32, wherein the computer readable instructions, when executed, further cause the apparatus to measure the data indicative of the behavior of said network in synchronized fashion with at least one other apparatus in the network.

35 (previously presented): The one or more computer readable media of claim 32, wherein the archive is a centralized archive storing data from a plurality of network apparatuses.

36 (previously presented): The one or more computer readable media of claim 32, wherein the network entity from which the trigger signal is received includes a centralized coordination apparatus configured to transmit trigger signals to a plurality of network apparatuses.

37 (currently amended): An apparatus comprising:

a processor; and

a buffer; and

memory storing computer readable instructions that, when executed, cause the apparatus to:

monitor operation of an application through a network interface including:
monitoring the network interface for data packets;
receiving, at the apparatus, a data packet as the data packet is being transmitted between two network nodes other than the apparatus through the network interface,
and
filtering the received data packet; and;
store network data associated with the data packet received through the network interface in the a buffer, the network data indicative of a behavior of the network;
receive a trigger signal from a remote network entity in response to a critical situation corresponding to the quality of service of the application; and
in response to receiving the trigger signal, transmit the stored network data to a remote network archive.

38 (previously presented): The apparatus of claim 37, wherein the computer readable instructions, when executed, further cause the apparatus to measure the data indicative of the behavior of said network in synchronized fashion with at least one other network apparatus.

39 (previously presented): The apparatus of claim 37, wherein the remote network archive is configured to receive data from a plurality of network apparatuses.